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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,229	07/07/2003	Yuji Murayama	107348-00354	7016

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EXAMINER

JACKSON, ANDRE L

ART UNIT PAPER NUMBER

3677

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/613,229	MURAYAMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Andre' L. Jackson	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-15 is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

*DETAILED ACTION*

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 27, 2006 has been entered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 4,194,265 to Zimmermann. Zimmermann discloses a door holder comprising a case (101) secured to one of a body and door; a check plate (102) which movably extends through the case to be connected to the other of the body and door and which is provided with ball guide grooves (115) on opposite sides extending in lengthwise direction; a pair of ball holders (103, 124) accommodated in the case and capable of advancing and retracting toward and away from the check plate; a pair of balls (105) which are retained in hemispherical ball housings (109) formed in the ball holders and which are rollably engaged in the ball guide grooves; and check springs (104, 127) for biasing the ball holders toward the check plate, wherein a recess (114) is formed in an inner

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surface of each ball housing and retains a grease within the recess, the recess also accommodates dust therein, wherein the recess has at least portions extending in the length wise direction of the ball guide groove through the center of the inner surface of the ball housing and wherein the recess is formed so that its outer end is closed along a whole periphery thereof by contact portions between the ball and inner peripheral surface of the ball housing.

As to claims 8 -10, the recess further includes an annular shape defining a groove or circular recess (116) located at a center of the inner surface of the ball housing that extends between and connects two portions on an outer peripheral surface of a respective ball which have differing distances from the ball guide groove (Fig. 2).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,862,570 to Lezuch et al in view of USPN 4,194,265 to Zimmermann. Lezuch et al (Figs. 1-5) discloses check arm assembly for an automobile, comprising;

a case (50) secured to one of a body (16) of an automobile and a door (12) pivotally supported on the body for turning movement; a check plate (18) which movably extends through the case to be connected to the other of the body and the door and which is provided in its opposite sides with ball guide grooves (32, 34) extending in a lengthwise direction;

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a pair of ball holders (62) accommodated in the case and capable of advancing and retracting toward and away from the opposite sides of the check plate; a pair of balls (68) which are retained in hemispherical ball housings formed in the ball holders and which are rollably engaged in the ball guide grooves; and a check spring (70) for biasing the ball holders toward the check plate, a recess (defined by the inner-open surface between flanges 66) for maintaining proper self lubricating properties between the balls relative to the ball housings. However, Lezuch et al fails to disclose that the recess retains grease within the recess, where the recess further accommodates a dust therein as claimed.

Zimmermann teaches a door holder for an automobile, including a case (101) secured to one of a body of an automobile and a door pivotally supported on the body for turning movement; a check plate (102) which movably extends through the case to be connected to the other of the body and door and which is provided at opposites sides with ball guide grooves (115) extending in a lengthwise direction; a pair of ball holders or ends (103, 124) accommodated in the case and capable of advancing and retracting toward and away from the guide grooves; a pair of balls (105) which are retained in hemispherical ball housings (109). A recess (114) is formed in an inner surface of each ball housing and retains grease within the recess, the recess also accommodates a dust therein (col. 3, lines 62-67) via a hole (116), which assists to prevent friction between balls and grooves and avoiding in loss in sliding operation of the door holder. Therefore, it would have been obvious to one having ordinary skill in the art to modify the check arm assembly of Lezuch et al to include the door holder as taught by Zimmermann to provide an improved check arm assembly assisting in the prevention of abrasion of the working parts during sliding movements while avoiding performance deficiency as a result of dirt and/or debris.

Further, Lezuch et al discloses an alternative embodiment, as seen in Fig. 6, where projections are integrally formed on a first sidewall (83) of each ball holder (80) and resiliently abuts against an inner side of the case, the projections are disposed at respective ends of and extending away from the sidewall of the ball holder, where a portion of the projections extend in a direction longitudinal of the check plate. However, applicant claim limitations require a projection disposed at a center of and extending away from the side of the ball holder. Here, Lezuch et al goes further to include a projection extending from a second sidewall (82) and disposed at a center of the ball holders respectively, which engage between the projections formed on the first sidewall. It would be obvious to one having ordinary skill in the art at the time of applicant's invention was made such that the projection of the second sidewall is now formed integrally and centrally located and extending away from the first sidewall and conversely, the projections of the first sidewall are formed and disposed at the second sidewall, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

As to claims 4-6, Lezuch et al in view of Zimmermann discloses that the recess of the door holder device further defines a circular recess (116) portion located at a center of the inner peripheral surface of the ball housing and connected to the groove via an annular portion (at 115) of the groove disposed near the ball guide grooves (Fig. 2). The annular portion of the recess is closed from the ball guide groove by a corresponding ball being placed in contact with the inner peripheral surface of the ball housing and at each side of the annular portion of the recess as seen in Fig. 2, convex grooves extend between and connect with two points on an outer peripheral surface of the ball which define distances from the ball guide grooves.

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As to claims 2 and 3, Lezuch et al discloses that the recess has portions (64) extending in a lengthwise direction forming a triangular configuration as seen in Fig. 5, where outer ends are corners of the recess portions is closed by contact between a respective ball and inner peripheral surface (62) of the ball housing.

### ***Allowable Subject Matter***

Claims 11-15 are deemed allowable over the prior art made of record.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to disclose or suggest in particular a pair of ball holders which are retained in a hemispherical ball housing respectively formed in the ball holders, wherein a recess is formed in a hemispherical inner surface of each ball housing designed to be depressed inwardly from the inner surface and retains a grease within the recess, the recess can receive dust therein and wherein the recess is formed so that its outer end is closed along a whole periphery thereof by portions of a respective ball and an inner surface of the ball housing.

None of the prior art references provide or suggest such a recess having deforming capabilities as set forth in the above claims whether taken alone or used in combination.

### ***Response to Applicant's Arguments***

Applicant's remarks filed in the Amendment of March 27, 2006 have been considered but are found not to be persuasive. Applicant has amended claim 1 to further recite that the projection is disposed at a center of and extending away from the a side of the ball holder in a direction parallel to a longitudinal axis of the check plate as claimed.

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Applicant contends neither Lezuch et al nor Zimmermann disclose or suggest the specific arrangement of the newly recited claim limitations as presently presented whether each reference is used singly or in combination. The Examiner disagrees with applicant and believes applicant fails to establish which direction of the check plate defines a longitudinal axis. Moreover, applicant's intended direction does not preclude Lezuch et al in view of Zimmerman from rendering obvious such an orientation as claimed since Lezuch et al discloses an alternative embodiment, as seen in Fig. 6, where projections are integrally formed on a first sidewall (83) of each ball holder (80) and resiliently abuts against an inner side of the case. The projections are disposed at respective ends of and extending away from the sidewall of the ball holder. As evidenced by figure 6, a portion or face of each projection extends in a direction parallel to a longitudinal axis of the check plate as determined by the Examiner. Although applicant claim limitations require a projection disposed at a center of and extending away from the side of the ball holder, Lezuch et al goes further to include a projection extending from a second sidewall (82) and disposed at a center of the ball holders respectively, which engage between the projections formed on the first sidewall. The Examiner believes it would be obvious to one having ordinary skill in the art at the time of applicant's invention was made to modify Lezuch et al such that the projection of the second sidewall is now formed integrally and centrally located and extending away from the first sidewall and conversely, the projections of the first sidewall are formed and disposed at the second sidewall, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. Subsequently, by this reversal of parts interpretation, the Examiner believes the structural limitations of applicant's claims as currently amended are met.



Therefore, for the reasoning above, the Examiner believes Lezuch et al in view of Zimmermann renders applicant's claims obvious and non-novel over the prior art.

As to applicant's new claims 7-10, the Examiner believes these claims are broader in scope than claims 1-6 and believed to be anticipated in view of Zimmermann alone. An explanation of how claims 7-10 are rejected appears above in this Action.

Regarding applicant's remarks pertaining to claims 11-15, the Examiner agrees and believes the prior art falls short in suggesting or disclosing the specific structural recess of each ball housing as claimed, thus these claims are believed to be patentably distinct from the prior art made of record.

For the foregoing explanation and reasoning set forth in the response to applicant's remarks, claims 1-10 are found to be unpatentable over the prior art of record. Claims 11-15 are deemed allowable over the prior art of record.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' L. Jackson whose telephone number is (571) 272-7067. The examiner can normally be reached on Mon. - Fri. (10 am - 6:30 pm).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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**ROBERT J. SANDY**  
**PRIMARY EXAMINER**